



**MASARYK
UNIVERSITY**

Czech Republic



**UNIVERSAL
LEARNING
DESIGN**

Web Guide to Physical Accessibility of Buildings

ICCHP/ULD 2016, Linz
July 13–15, 2016

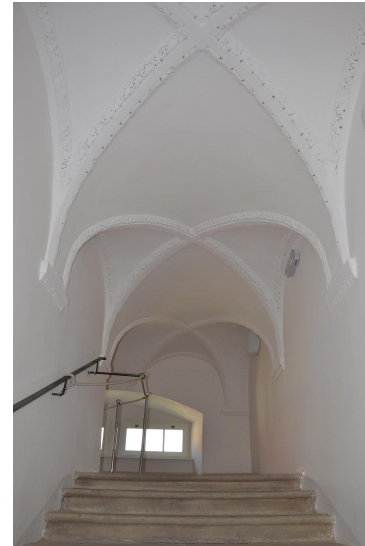
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Introduction

- activities of Masaryk University (MU) – dozens of buildings which are of different age and architectural styles



Introduction

Individuals with mobility difficulties at MU:

- about 70 students
- in 8 faculties, approx. 20 field of studies
- diverse types of disabilities





Introduction

Teiresias – Support Centre for Students with Special Needs

- university-wide unit providing services
- making curricula and educational environment accessible for students, teachers and employees with special needs
- → inter alia: eliminating physical barriers in university premises
- mapping accessibility of buildings

www.teiresias.muni.cz



Mapping – related solutions

1. partly interactive maps plotting barrier-free entrances or marking accessible paths in campuses
 - Boston University Maps
 - Harvard University Campus Map
 - Stanford University – Campus Access Guide
 - Western University – Campus accessibility map

Mapping – some existing solutions (cont'd)

2. verbal description of the specific elements
 - Stadtführer barrierefreies Bremen – Informations für Alle
3. combination: interactive maps with a brief description
 - Wheelmap.org
 - Mapy bez bariér (*Barrier-free Maps, CZ*)
 - ...

Color-coding of accessibility rate; updated by user community

Our methodology

- **not to assess** a building whether it simply conforms the regulation or not
- **but: to keep records** of technical specifications relevant to have a view on practical accessibility of the building

Is the building accessible?

~~Yes/Partly/No~~ → **HOW?**

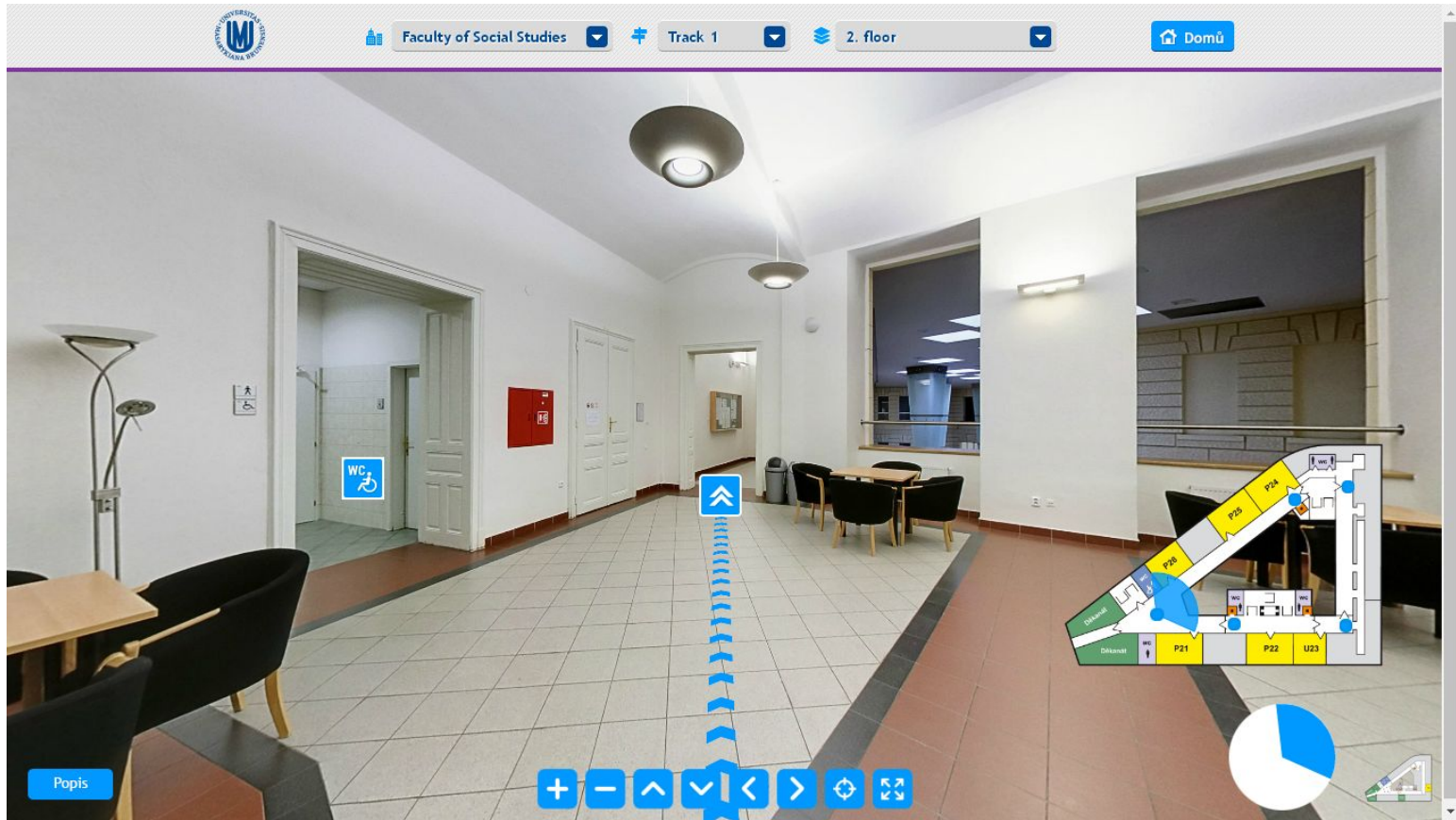
Virtual guide – structure

- web-based application, for several platforms
- primary idea: kind of virtual guide
- consists of:
 - panoramic images of key points (360 degrees)
 - still images
 - text descriptions of the key points
 - trace lines indicating typical tracks (and linking images)
 - interactive plan view
 - navigation controls

Virtual guide – content

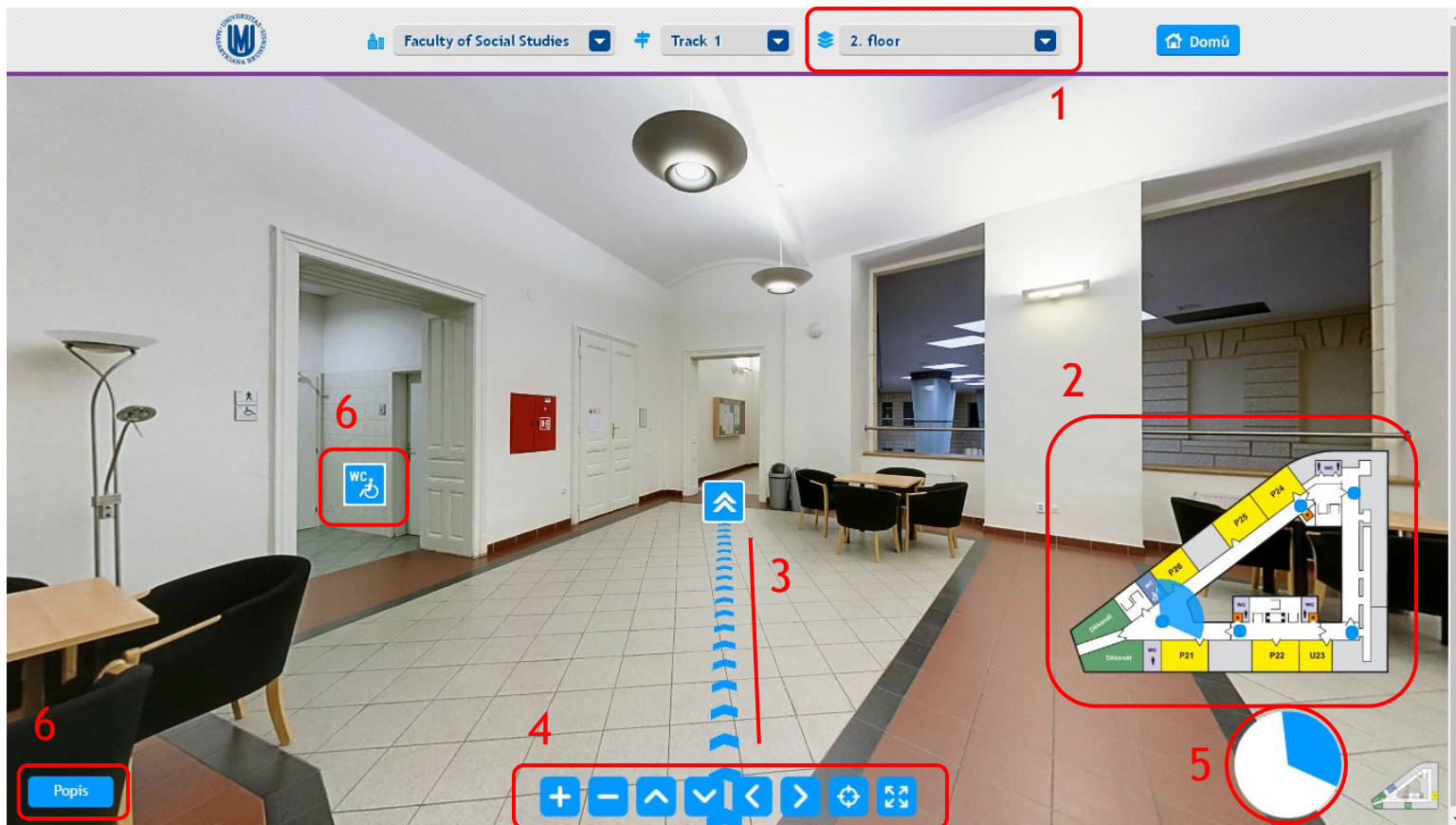
- barrier-free entrance into the building
- barrier-free options of moving within the building vertically (location of elevators, ramps, lift platforms etc.)
- barrier-free cloakrooms
- highlighting of typical tracks to the most used destinations (teaching rooms, libraries, dining hall etc.)

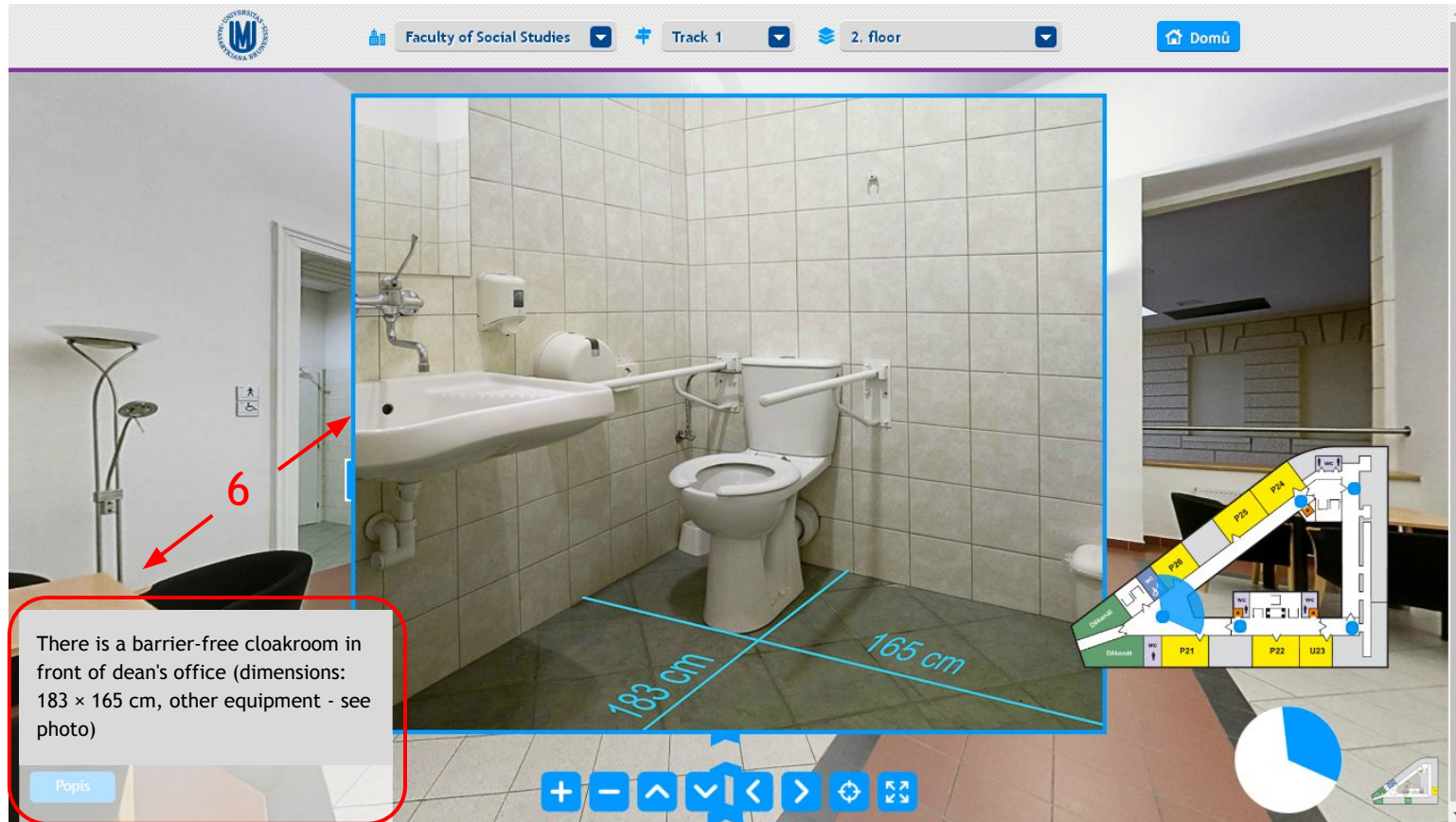
Including accurate technical specifications (e.g. dimensions, gradient, instructions to use devices etc.)



Virtual guide – how to use

- moving within the building vertically – top controls (1)
- moving within the building horizontally:
 - interactive plan view (2)
 - trace lines (3)
- key points – viewing and interacting:
 - bottom controls (4)
 - interactive sphere (5)
- technical specifications:
 - text descriptions and still images (6)







Virtual guide – technologies applied

- starting index of university buildings
(list of faculties and map):
 - *Kentico* CMS (part of our main web system)
- virtual guide itself:
 - *Krpano, Panotour* systems



Virtual guide and the future...

- to add features (e.g. users' notifications of updates, changes and malfunctions discovered in the buildings)
- to process data of further buildings of MU
- closer interconnection with the central information system of MU



Support Centre for Students with Special Needs Masaryk University

www.teiresias.muni.cz

[/guide-to-accessible-buildings](http://www.teiresias.muni.cz/guide-to-accessible-buildings)

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